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ABSTRACT OF THE DISCLOSURE

In the present invention, for an unprocessed joint, a joint index and a joint rotation angle are obtained (S25, S27). For the unprocessed vertex corresponding to the obtained joint index, a vertex index and a weight  $w$  for the vertex are obtained. On the basis of the weight  $w$  and the rotation angle in the current frame, coordinate values of the vertex buffer are changed. A quaternion  $q_1$  according to the joint rotation angle in the current frame and a unit quaternion are sphere-linear interpolated with the weight  $w$ . From the resultant quaternion  $q$ , a conversion matrix  $R$  is determined for the joint. An overall conversion matrix  $M$  is obtained as  $M = RJTB$ , where a matrix  $T$  represents a relative coordinates from a parent joint, a matrix  $J$  represents a basic rotation angle, and  $B$  denotes a conversion matrix of the parent joint.

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